

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

- 1 1. (currently amended) A data management method, comprising:
2 backing up contents of a source device at a first client station as at least one object
3 of a database stored in a data storage subsystem wherein the at least one object represents
4 an image of the contents of the source device and wherein the contents of the source
5 device includes a plurality of files and a file directory of the source device;
6 using the database, tracking attributes and location of the at least one object in the
7 database;
8 using the at least one object, restoring the contents of the source device from the at
9 least one object to a single target file in a file system stored on a storage device so that
10 the target file contains said contents of the source device, wherein said target file is not an
11 object of said database and wherein said file system ~~comprising~~ comprises a plurality of
12 files and an address table identifying the location of each file on said storage device; and
13 copying the restored contents of the source device from the single target file to a
14 target device so that the target device contains the contents of the source device.
- 1 2. (previously presented) The method of claim 1 wherein the target file is stored
2 on storage media at a second client station.
- 1 3. (previously presented) The method of claim 1 wherein the target file contains
2 the complete contents of the source device.
- 1 4. (cancelled)

1 5. (original) The method of claim 1 wherein the data storage subsystem includes
2 a server coupled to the first client station by a network.

1 6. (original) The method of claim 1 further comprising, using the at least one
2 object, restoring the contents of the source device from the at least one object to a target
3 device so that the target device contains the contents of the source device.

1 7. (original) The method of claim 1 wherein the source device is a raw storage
2 device.

1 8. (original) The method of claim 7 wherein the source raw storage device is a
2 logical volume of at least one magnetic disk drive.

1 9. (previously presented) The method of claim 7 wherein the source raw storage
2 device is a partition of a magnetic disk drive.

1 10. (original) The method of claim 1 further comprising mounting the source
2 device as a read only device wherein write operations to said source device are prevented
3 during said backing up of said source device.

1 11. (previously presented) The method of claim 1 wherein said target file is a flat
2 file.

1 12. (original) The method of claim 1 wherein said copying uses the UNIX dd
2 command.

1 13. (currently amended) An article of manufacture for data management,
2 wherein the article of manufacture causes operations to be performed, the operations
3 comprising:

4 backing up contents of a source device at a first client station as at least one object
5 of a database stored in a data storage subsystem wherein the at least one object represents
6 an image of the contents of the source device and wherein the contents of the source
7 device includes a plurality of files and a file directory of the source device;

8 using the database, tracking attributes and location of the at least one object in the
9 database;

10 using the at least one object, restoring the contents of the source device from the at
11 least one object to a single target file in a file system stored on a storage device so that
12 the target file contains said contents of the source device wherein said target file is not an
13 object of said database, said file system comprising a plurality of files and an address
14 table identifying the location of each file on said storage device; and

15 copying the restored contents of the source device from the single target file to a
16 target device so that the target device contains the contents of the source device.

1 14. (previously presented) The article of manufacture of claim 13 wherein the
2 target file is stored on storage media at a second client station.

1 15. (previously presented) The article of manufacture of claim 13 wherein the
2 target file contains the complete contents of the source device.

1 16. (cancelled)

1 17. (original) The article of manufacture of claim 13 wherein the data storage
2 subsystem includes a server coupled to the first client station by a network.

1 18. (original) The article of manufacture of claim 13 wherein the operations
2 further comprise:
3 using the at least one object, restoring the contents of the source device from the at
4 least one object to a target device so that the target device contains the contents of the
5 source device.

1 19. (original) The article of manufacture of claim 13 wherein the source device is
2 a raw storage device.

1 20. (original) The article of manufacture of claim 19 wherein the source raw
2 storage device is a logical volume of at least one magnetic disk drive.

1 21. (previously presented) The article of manufacture of claim 19 wherein the
2 source raw storage device is a partition of a magnetic disk drive.

1 22. (original) The article of manufacture of claim 13 wherein the operations
2 further comprise:
3 mounting the source device as a read only device wherein write operations to said
4 source device are prevented during said backing up of said source device.

1 23. (previously presented) The article of manufacture of claim 13 wherein said
2 target file is a flat file.

1 24. (original) The article of manufacture of claim 13 wherein said copying uses
2 the UNIX dd command.

1 25. (currently amended) A subsystem for managing data for use with a plurality
2 of client stations coupled together by a network, said client stations including a source

3 client station having a source device and a target client station having a target device
4 storing a file system comprising a plurality of files and an address table identifying the
5 location of each of said plurality of files, comprising:

6 a data storage device having a database comprising a plurality of objects;

7 a digital data processing apparatus coupled to the storage device, wherein the
8 digital data processing apparatus is programmed to perform a data management method,
9 said method comprising:

10 backing up contents of a source device at a source client station as at least
11 one object of said database stored in said data storage device wherein the at least
12 one object represents an image of the contents of the source device and wherein
13 the contents of the source device includes a plurality of files and a file directory
14 of the source device;

15 using the database, tracking attributes and location of the at least one
16 object in the database;

17 using the at least one object, restoring the contents of the source device
18 from the at least one object to a single target file in said file system stored on a
19 target device of a target client station so that the target file contains said contents
20 of the source device wherein said target file is not an object of said database; and

21 copying the restored contents of the source device from the single target
22 file to a target device of a target client station so that the target client station
23 contains the contents of the source device.

1 26. (previously presented) The subsystem of claim 25 wherein the target file is
2 stored on a target device of a target client station different from said source client station.

1 27. (previously presented) The subsystem of claim 25 wherein the target file
2 contains the complete contents of the source device.

1 28. (cancelled)

1 29. (original) The subsystem of claim 25 wherein the digital data processing
2 apparatus includes a server coupled to the first client station by said network.

1 30. (original) The subsystem of claim 25 wherein said method further
2 comprises:
3 further comprising, using the at least one object, restoring the contents of the
4 source device from the at least one object to a target device so that the target device
5 contains the contents of the source device.

1 31. (original) The subsystem of claim 25 wherein the source device is a raw
2 storage device.

1 32. (original) The subsystem of claim 31 wherein the source client station has a
2 magnetic disk drive and wherein the source raw storage device is a logical volume of
3 said magnetic disk drive.

1 33. (previously presented) The subsystem of claim 31 wherein the source client
2 station has a magnetic disk drive and the source raw storage device is a partition of said
3 magnetic disk drive.

1 34. (original) The subsystem of claim 25 wherein said method further comprises:
2 mounting the source device as a read only device wherein write operations to said
3 source device are prevented during said backing up of said source device.

1 35. (previously presented) The subsystem of claim 25 wherein said target file is a
2 flat file.

- 1 36. (original) The subsystem of claim 25 wherein said copying uses the UNIX dd
2 command.